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THE MILLIPED GENUS *BIDENTOGON* (DIPLOPODA, POLYDESMIDA, TRICHOPOLYDESMIDAE)

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Buckett and Gardner (1968) described the milliped genus *Bidentogon* for a new species, *B. helferorum*, from Mendocino County, California. While examining the general collection of millipeds in the Museum of Comparative Zoology, Cambridge, Massachusetts, I ran across the type-specimen of *Brachydesmus californicus* Chamberlin, described in 1918, and apparently never filed in the type-collection, even though the vial was clearly labelled "HOLOTYPE." Detailed examination of the gonopods of the minute animal revealed that the species does not, of course, belong to *Brachydesmus*, an European genus with no native species in the United States, but is a member of the family Trichopolydesmidae, and is undoubtedly congeneric with *Bidentogon helferorum*. The purpose of this paper is thus to provide illustrations of *B. californicus*, not previously available, with comparative figures and a new record of *B. helferorum*. I have also added a brief note on the use of the family name Trichopolydesmidae, a source of some recent confusion.

ORDER POLYDESMIDA

Trichopolydesmidae Verhoeff, 1910

Bidentogon Buckett and Gardner

Bidentogon Buckett and Gardner, 1968, Pan-Pacific Entomol. 44:198. Type-species *Bidentogon helferorum* Buckett and Gardner.

Diagnosis: Distinct from other known North American trichopolydesmid genera in having 19 segments rather than 20, and in the simple,

two-branched gonopods. See Loomis (1960) for detailed illustrations and descriptions of other genera.

Despite the reduced segment number, a rather common adaptation among millipeds to small size, species of *Bidentogon* seem at present to be most closely related to *Speorthus tuganbius* Chamberlin (Loomis, 1960, p. 66–68, Figs. 14–16), a 20-segmented trichopolydesmid from Carlsbad Caverns, New Mexico, with simple gonopods.

Bidentogon helferorum Buckett and Gardner
Figures 1–3

Bidentogon helferorum Buckett and Gardner, 1968, Pan-Pacific Entomol. 44:198–202, Figs. 1–7, ♂, ♀.

New record: California: Alameda County, Oakland, 24 February 1962, Art Raske, ♂ ♂, ♀ ♀. Specimens deposited in Museum of Comparative Zoology.

Bidentogon californicus (Chamberlin) NEW COMBINATION
Figures 4–5

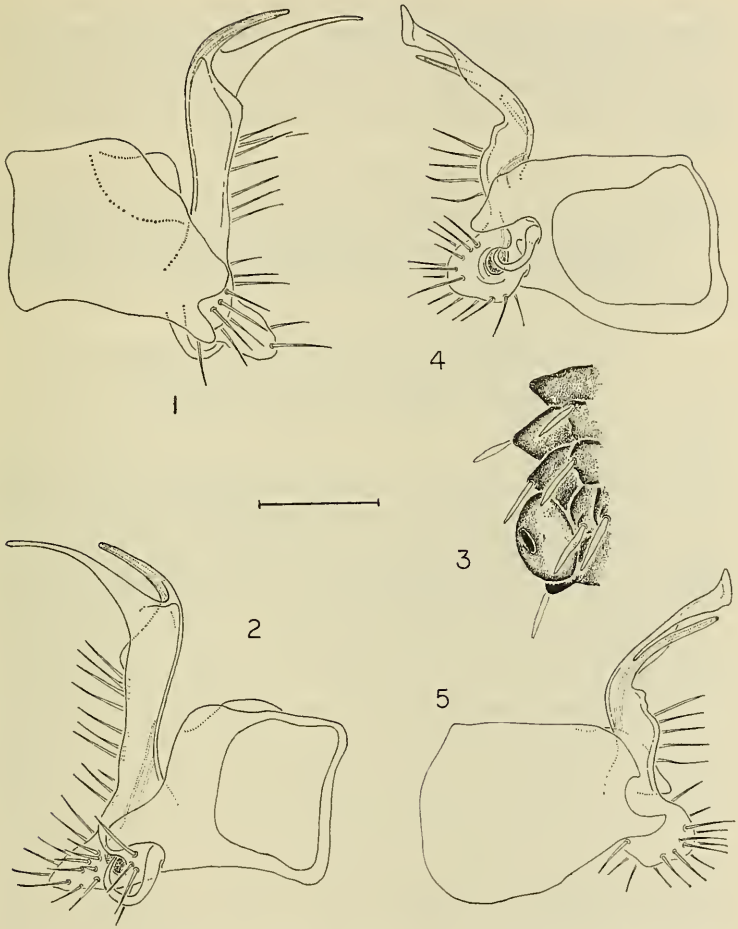
Brachydesmus californicus Chamberlin, 1918, Pomona College J. Ent. Zool. 10:9, no figures; Chamberlin and Hoffman, 1958, U. S. Nat. Mus. Bull. 212:64.

Types: Male and female cotypes from Sacramento, California, collected January 1914, by M. G. Childs, from debris in a hollow apple tree; deposited in Museum of Comparative Zoology.

The two species of *Bidentogon* differ mainly in the form of the gonopods; the mesal branch has a spatulate, incurved tip in *B. californicus* and is evenly tapered and acuminate in *B. helferorum.* The exhaustive description of the nonsexual characters of *B. helferorum* given by Buckett and Gardner (1968) fits *B. californicus* nearly to the letter.

Usage of the family name Trichopolydesmidae: Buckett and Gardner (1968) used the family name Vanhoeffeniidae in describing *Bidentogon.* Loomis (1960) pointed out, citing the papers of Jeekel mentioned below, that the usage of this family name may be incorrect, but continued to refer to the several genera and species he treated (Loomis, 1960) as "vanhoeffeniids." I followed Loomis (Shear, 1969) and used the name Vanhoeffeniidae in a key to United States cave millipeds.

However, Jeekel (1956) placed the generic name *Vanhoeffenia* as a senior subjective synonym of *Gnomoskelus,* and transferred the genus to the family Dalodesmidae (Jeekel, 1965). The other genera included in the old "family" Vanhoeffeniidae are not dalodesmids, and thus the removal of the type-genus of the family to the Dalodesmidae leaves these genera, which do belong together, without a family name. Kraus (1957) pointed out that the oldest family group name remaining for them is Trichopolydesmidae Verhoeff, 1910. The results of this nomenclatorial tangle are the placement of the name Vanhoeffeniidae as a junior subjec-



Figs. 1–3. *Bidentogon helferorum.* Fig. 1, right gonopod, lateral view. Fig. 2, right gonopod, mesal view. Fig. 3, left paranotum of segment 13. Figs. 4–5, *B. californicus.* Fig. 4, right gonopod, mesal view. Fig. 5, right gonopod, lateral view.

tive synonym of Dalodesmidae Cook, 1896, and the mandated use of the family name Trichopolydesmidae for the genera formerly grouped with *Vanhoeffenia.*

Thus North American authors should abandon the use of the family name Vanhoeffeniidae and use the family name Trichopolydesmidae for the former "vanhoeffeniids."

Taxonomists working on other groups often express astonishment at the complications of milliped nomenclature. If diplopod taxonomists seem overly preoccupied with names, it is out of a necessity for untangling the redundant, carelessly proposed higher category names published by early authors with a complete disregard for priority and for each other's work.

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